Mortality Among Littoral Fauna at Rottnest Island.—In January 1959 Dr. E. P. Hodgkin reported the catastrophic destruction of littoral fauna and flora on the shore platforms near Fremantle (W.A. Nat., 7: 6-11). The catastrophe was due to a combination of several factors, very low tides, heat and still water. These effects were also noted at Rottnest.

When I was working on the reef at Cape Vlaming, Rottnest Island, on January 2, 1962, evidence of a similar catastrophe was noted. The following animals were dead or dying on the reef platform:—

#### Coelenterata

The Beadlet Anemone (Actinia tenebrosa). These animals were found floating in pools; many were in a state of decomposition.

#### Mollusca

Chitons (*Clavarizonia*), which usually stand extremes of desiceation and heat, were found lying at the bottom of pools near their homes.

The limpet colonics appeared to have suffered greatly. Dead specimens of *Siphonaria luzonica* and *Patelloida alticostata* were found and their empty home sites were very evident.

Many specimens of small Sea Hares (Aplysia) were found lying at the bottom of pools.

## Crustacea

Small erabs were seen, many in a state of decomposition. They appeared to be those usually associated with sponges.

## Echinodermata

Large numbers of dead *Echinometra mathaei* were found; all were in a state of decomposition. A few dead *Tripneustes gratilla* were also seen.

# Vertebrata

Blennies were noted in an exhausted condition, swimming near the surface. They reacted very sluggishly when handled.

The weather at the time was very hot and the water on the reef particularly still and warm. Dr. Hodgkin informs me that on January 1 and 2 tide levels on the Fremantle gauge were normal for summer conditions, never falling below 1.9 ft. with a mean of 2.3 ft. on 1st. However, on December 28, 29 and 30, although not exceptionally low, they ranged between 1.0 and 2.1 ft. with a mean of 1.6 ft. The Cape Vlaming platforms lie between 1.7 and 2.5 ft. above datum and, if the sca was ealm, there would be little renewal of water on them during these three days.

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